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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,544	01/20/2006	Anders Umegard	0091-0244PUS1	7897

2292 7590 02/14/2008  
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EXAMINER
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HAYES, KRISTEN C

ART UNIT	PAPER NUMBER
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3643

NOTIFICATION DATE	DELIVERY MODE
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02/14/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,544	<b>Applicant(s)</b> UMEGARD ET AL.	
	<b>Examiner</b> Kristen C. Hayes	<b>Art Unit</b> 3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20071109</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 5-7 recite the limitation "the receiver". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van den Berg EP 0713641 in view of Moskvina US Patent 5,161,483.
7. Regarding claim 1, Van den Berg discloses a method for calibrating at least one milk meter (3) in a milking system comprising at least one milking station (100) having at least one

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milk meter that measures at least one value of a parameter that corresponds to the milking performance of a milking animal (column 1; lines 39-40, 45-46) said milking station is accessible to a herd of milking animals (column 1, lines 1-2), characterized in that said method comprises the steps of: determining an internal or external reference value which reflects the amount of milk received from a number of milking animals during a selected time period in a reference unit (column 3, lines 54 – column 4, line 1), retrieving all measured values during the selected time period for each milk meter that by itself contribute to the amount of milk received by said reference unit (6), comparing said reference value with the sum of all retrieved measured values (column 4, lines 1-4). Van den Berg does not teach calculating a correction function for at least one of said milk meters, and using said calculated correction function to adjust the measured value from said at least one milk meter. However, Moskvin teaches calculating a correction function (column 8, lines 60-63) for at least one of said milk meters, and using said calculated correction function to adjust the measured value from said at least one milk meter (column 8, lines 63-67). Calculating the correction function, and using said calculated correction function to adjust the measured value can improve the accuracy of the meter that measures the milking performance of the milking animal, as known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method steps of Van den Berg with the teachings of Moskvin in order to adjust the measured value of the milking meter, as known in the art. The method of Van den Berg is then inherently performed.

8. Regarding claim 2, Van den Berg in view of Moskvin discloses a device with the limitations of claim 1. Moskvin teaches a milk meter that has been determined to be in need of a calibration by comparing an expected value of the milking performance with the measured value (column 8, lines 12-16). To achieve optimum performance of a milking system, it is critical to know the exact performance of that system. Calibration of the system by comparing measured

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values to expected values would ensure that the exact output of the system was known. Given the structure, the method is inherently performed, as discussed above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Van den Berg with the device and inherent method steps of Moskvina to achieve optimum performance of the milking system.

9. Regarding claim 3, Van den Berg in view of Moskvina discloses a device with the limitations of claim 1. Moskvina teaches said reference unit being a receiver (16) that collects the milk in the system after milking of each milking animal, and said step of determining the reference value is performed by measuring the amount of the milk in the receiver, thus said reference value is an internal reference value (column 4, lines 44-55). The receiver collecting the milk in the system after the milking of each animal would provide a central location for the milk to be measured. This way, the milk could be measured at rest instead of as it was flowing through the lines, which would provide a more accurate measure of parameters such as volume, weight, and yield. Given the structure of the combination, the method is inherently performed, as discussed above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Van den Berg with the receiver and inherent method steps of Moskvina to provide a more accurate measurement of the parameters.

10. Regarding claim 4, Van den Berg in view of Moskvina discloses a device with the limitations of claim 1. Van den Berg further discloses said reference unit being an intermediate milk meter (16) which is directly connected to at least one milk meter (5), and said step of determining the reference value is performed by measuring a value of a milking performance parameter of said intermediate milk meter, thus said reference value is an internal reference value, which may be compared to the values measured by each milk meter (column 4, lines 44-55).

11. Regarding claims 8 and 9, Van den Berg in view of Moskvina discloses a device with the limitations of claim 1. The correction function selected to be equal to 1 unless the reference values deviate more than a predetermined amount from the sum of all retrieved measured milking performance values is not taught. When comparing reference values to measured values to achieve a ratio of the two, if the values differ there will be a coefficient greater or less than 1. If the values were the same, meaning there is no difference or error between the two, then the ratio would be 1. The coefficient would then be multiplied by the measured value to correct it to the reference value. If the coefficient were 1, it would still be multiplied by the measured value, which would not change it, signifying that there was no difference between the two. Said predetermined amount selected to be 5% is not taught. The amount that the reference value deviated from the measured value would be the error of the value. It is common for those skilled in the art to allow an acceptable amount of predetermined error in their systems, usually less than 10%. This acceptable amount of error would ensure that the system wasn't constantly correcting itself over small insignificant errors that would probably have little or no effect on the system. Also, given the structure, the method is inherently performed, as discussed above. Therefore, it would have been obvious to one skilled in the art that device of Van den Berg in view of Moskvina was able to select a correction function equal to 1 unless the reference values deviate more than a predetermined amount (5%) from the sum of all retrieved measured milking performance values, since the value of the correction function could aid in controlling the error in the system.

12. Regarding claim 10, Van den Berg in view of Moskvina discloses a device with the limitations of claim 1. Moskvina teaches the milking system comprising a control device (31) connected to each milk meter, said internal or external reference value being accessible to said control unit, and said calculations of correction functions being performed in said control unit

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(column 4, lines 33-35). The control device would be a simple and efficient way to calculate the correction functions, as known in the art. The control device would save time, effort, and reduce the chance of human error being introduced into the calculations. Given the structure, the method is inherently performed, as discussed above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Van den Berg with the control device and inherent method steps of Moskvina to save time, effort, and reduce the chance of human error being introduced into the calculations.

13. Claims 1, 2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wendl et al (A method for continuous automatic monitoring of accuracy of milk recording equipment).

14. Regarding claim 1, Wendl discloses a method for calibrating at least one milk meter (Wendl, page 339: lines 1-2) in a milking system comprising at least one milking station (Wendl, Table 1) having at least one milk meter that measures at least one value of a parameter that corresponds to the milking performance of a milking animal (the milk meter of Wendl measures the production of milk from the animal) said milking station is accessible to a herd of milking animals (Wendl, Table 1), characterized in that said method comprises the steps of: determining an internal or external reference value which reflects the amount of milk received from a number of milking animals during a selected time period in a reference unit (Wendl, page 341: Expected value for single milk yield, lines 1-3), retrieving all measured values during the selected time period for each milk meter that by itself contribute to the amount of milk received by said reference unit (Wendl, Figure 1), comparing said reference value with the sum of all retrieved measured values (Wendl, Figure 1). Wendl does not teach calculating a correction function for at least one of said milk meters, and using said calculated correction function to adjust the measured value from said at least one milk meter. However, Moskvina teaches calculating a

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correction function (column 8, lines 60-63) for at least one of said milk meters, and using said calculated correction function to adjust the measured value from said at least one milk meter (column 8, lines 63-67). Calculating the correction function, and using said calculated correction function to adjust the measured value can improve the accuracy of the meter that measures the milking performance of the milking animal, as known in the art. Also, calculating the correction function and using the calculated correction function to adjust the measured value is a predictable result of gathering the measured and expected values. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method steps of Wendl with the teachings of Moskvina in order to adjust the measured value of the milking meter, as known in the art.

15. Regarding claim 2, Wendl in view of Moskvina discloses a device with the limitations of claim 1. Moskvina teaches a milk meter that has been determined to be in need of a calibration by comparing an expected value of the milking performance with the measured value (column 8, lines 12-16). To achieve optimum performance of a milking system, it is critical to know the exact performance of that system. Calibration of the system by comparing measured values to expected values would ensure that the exact output of the system was known. Calibration of this type is well known in the art. Given the structure, the method is inherently performed. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Wendl with the device and inherent method steps of Moskvina because determining the milk meter is in need of calibration is the predictable result of finding the measured and expected values of the meter.

16. Regarding claim 5, Wendl in view of Moskvina discloses a device with the limitations of claim 1. But does not disclose an external unit or an external milk meter. However, Moskvina discloses a milk meter (16) and a unit (5). Making the milk meter and unit of Moskvina external



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would allow for the system to be measured from outside the system. This would eliminate the possibility of intermediate error and allow the user to determine if the entire system was functioning properly. The reference value being determined by measuring the milk transferred from the receiver (as best understood) to the external unit would provide a value which could be used to determine the functionability of the milk meters, as known in the art and discussed above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Wendl in view of Moskvina so the milk meter and unit of Moskvina was external, as discussed above.

17. Regarding claim 6, Wendl in view of Moskvina discloses a method with the limitations of claim 1. Not disclosed is determining the amount of milk in the receiver prior to transferring the milk to the external unit of comparing the amount of milk or calculating a correction function. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Wendl in view of Moskvina to include these method steps since these method steps would provide the predictable results of calibrating the system.

18. Regarding claim 7, Wendl in view of Moskvina discloses a method with the limitations of claim 1. Not disclosed is recalibrating the milk meters when the correction function has been calculated. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Wendl in view of Moskvina and recalibrate the milk meters that contribute to the amount of milk received by the receiver (as best understood) when the correction function had been calculated because doing so would provide the predictable results of maintaining the accuracy of the system.

### ***Response to Arguments***

19. Applicant's arguments filed 09 November 2007 have been fully considered but they are not persuasive.

20. With regards to the applicant's arguments of claim 1, the examiner maintains the rejection. Van Den Berg discloses a milk meter (3) (Van den Berg, column 2: line 30). Van den Berg also discloses that it is known in the art to use a milk meter to calculate milk yield using a milk meter (Van den Berg, column 4: line 20). Calibrating a milk meter would predictably be done by using the information gathered from using the device of Van den Berg and Moskvín's method of calculating a correction function.

21. The examiner also presents new rejections based on information disclosed in the applicant's IDS.

22. The previously indicated allowability of the objected to claims (claims 5-7) is withdrawn.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristen C. Hayes whose telephone number is 571-270-3093. The examiner can normally be reached on Monday-Thursday, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571)272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCH  
1 February 2008

Peter Poon  
Examiner  
Art Unit 3643

/Peter M. Poon/

Supervisory Patent Examiner, Art Unit 3643